In The Claims

Applicant submits below a complete listing of the current claims, with insertions, if any, indicated by underlining and deletions, if any, indicated by strikeouts and/or double bracketing.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently Amended) A terminal for generating a high-frequency electromagnetic field by means of an oscillating circuit, adapted to ~~cooperating~~ cooperate with at least one transponder when said transponder enters ~~this~~ the electromagnetic field, and including:

means for regulating a signal phase in the oscillating circuit with respect to a reference value; and

means for evaluating, based on a measurement of a current in the oscillating circuit, a minimum number of transponders present in the electromagnetic field.

2. (Currently Amended) The terminal of claim 1, further including means for evaluating, based on a measurement of a voltage across a capacitive element of the oscillating circuit, ~~for evaluating the~~ a maximum number of transponders present in the ~~terminal's~~ electromagnetic field.

3. (Currently Amended) The terminal of claim 1, including means for determining and storing characteristic information, relative to voltages across the capacitive element of ~~its~~ the oscillating circuit and to currents in ~~this~~ the oscillating circuit, in several determined configurations, of a distance separating one or several transponders from the terminal, and for taking ~~these~~ the characteristic information into account in evaluating the maximum and/or minimum number of transponders.

4. (Currently Amended) The terminal of claim 3, wherein said characteristic information includes~~, among others~~:

a voltage across the capacitive element when no transponder is present in the electromagnetic field of the terminal;

a voltage across the capacitive element when a transponder is in a relation of maximum closeness with the terminal;

a current in the oscillating circuit when no transponder is present in the ~~terminal's~~ electromagnetic field; and

a current in the oscillating circuit when a transponder is in a relation of maximum closeness with the terminal.

5. (Currently Amended) The terminal of claim 1, wherein ~~the~~ evaluation of the minimum number of cards is performed without interpreting possible data messages carried by the high-frequency electromagnetic field.

6. (Currently Amended) A method ~~for~~ of establishing at least one communication between a terminal generating a high-frequency ~~magnetic~~ electromagnetic field and ~~an electromagnetic~~ a transponder, including:

periodically sending a request sequence until at least one transponder entering the field sends an acknowledgement, and

~~of~~ evaluating, based on a measurement of a current in an oscillating circuit of the terminal, a minimum number of transponders likely to be present in the electromagnetic field.

7. (Currently Amended) The method of claim 6, wherein said ~~evaluation~~ evaluating includes comparing ~~the~~ a measured current with previously calculated and stored values corresponding to evaluations of a maximum current for several minimum numbers of transponders.

8. (Currently Amended) The method of claim 6, further including, based on ~~the~~ evaluation of the minimum number and on a measurement of a present voltage across a capacitive element of the oscillating circuit, evaluating a maximum number of transponders likely to be present in the ~~terminal's~~ electromagnetic field.

9. (New) The terminal of claim 1, wherein the means for evaluating includes means for evaluating the minimum number of transponders present in the electromagnetic field at a particular time.

10. (New) The method of claim 6, wherein the evaluating includes evaluating the minimum number of transponders likely to be present in the electromagnetic field at a particular time.

11. (New) A terminal adapted to generate an electromagnetic field and to communicate with at least one transponder that is present in the electromagnetic field, the terminal comprising:

an oscillating circuit;

a first circuit to measure the current in the oscillating circuit; and

a second circuit to determine, based at least in part on the measured current, a minimum number of transponders present in the electromagnetic field.

12. (New) The terminal of claim 11, wherein the second circuit comprises a microprocessor.

13. (New) The terminal of claim 11, wherein the first circuit includes means for measuring the current in the oscillating circuit.

14. (New) The terminal of claim 11, wherein the second circuit includes means for determining, based at least in part on the measured current, a minimum number of transponders present in the electromagnetic field.

15. (New) The terminal of claim 11, further comprising:

a phase regulation loop adapted to regulate a phase of a current in the oscillating circuit.

16. (New) The terminal of claim 15, wherein the oscillating circuit comprises a variable capacitance, and wherein the phase regulation loop includes a comparator circuit that

generates a control signal responsive to a detected phase interval between the phase of the current in the oscillating circuit and a reference value, and wherein a value of the variable capacitance is controlled by the control signal.

17. (New) The terminal of claim 11, wherein the oscillating circuit comprises a capacitive element, the terminal further comprising:

voltage-measuring circuitry to measure a voltage across the capacitive element of the oscillating circuit, wherein the second circuit is operative to determine a maximum number of transponders present in the electromagnetic field based at least in part on the measured voltage.

18. (New) The terminal of claim 11, wherein the second circuit is operative to determine the minimum number of transponders present in the electromagnetic field without analyzing data transmitted by any of the at least one transponder present in the electromagnetic field.

19. (New) The terminal of claim 11, wherein the second circuit is operative to determine the minimum number of transponders present in the electromagnetic field at a particular time.

20. (New) A method of determining a number of transponders present in an electromagnetic field generated by a terminal including an oscillating circuit, the method comprising:

measuring a current in the oscillating circuit; and

determining, based on a comparison of the measured current with a reference value, a minimum number of transponders present in the electromagnetic field.

21. (New) The method of claim 20, further comprising:

regulating a phase of a current signal in the oscillating circuit.

22. (New) The method of claim 21, wherein the oscillating circuit comprises a variable capacitance, and wherein regulating a phase of the current signal includes detecting a

phase interval between the phase of the current in the oscillating circuit and a reference value, and generating a control signal in response to the detection, the control signal controlling a value of the variable capacitance.

23. (New) The method of claim 20, wherein the oscillating circuit comprises a capacitive element, the method further comprising:

measuring a voltage across the capacitive element of the oscillating circuit, and

determining a maximum number of transponders present in the electromagnetic field based at least in part on the measured voltage.

24. (New) The method of claim 20, wherein the minimum number of transponders present in the electromagnetic field is determined without analyzing data transmitted from any of the number of transponders present in the electromagnetic field.

25. (New) The method of claim 20, wherein the determining includes determining the minimum number of transponders present in the electromagnetic field at a particular time.